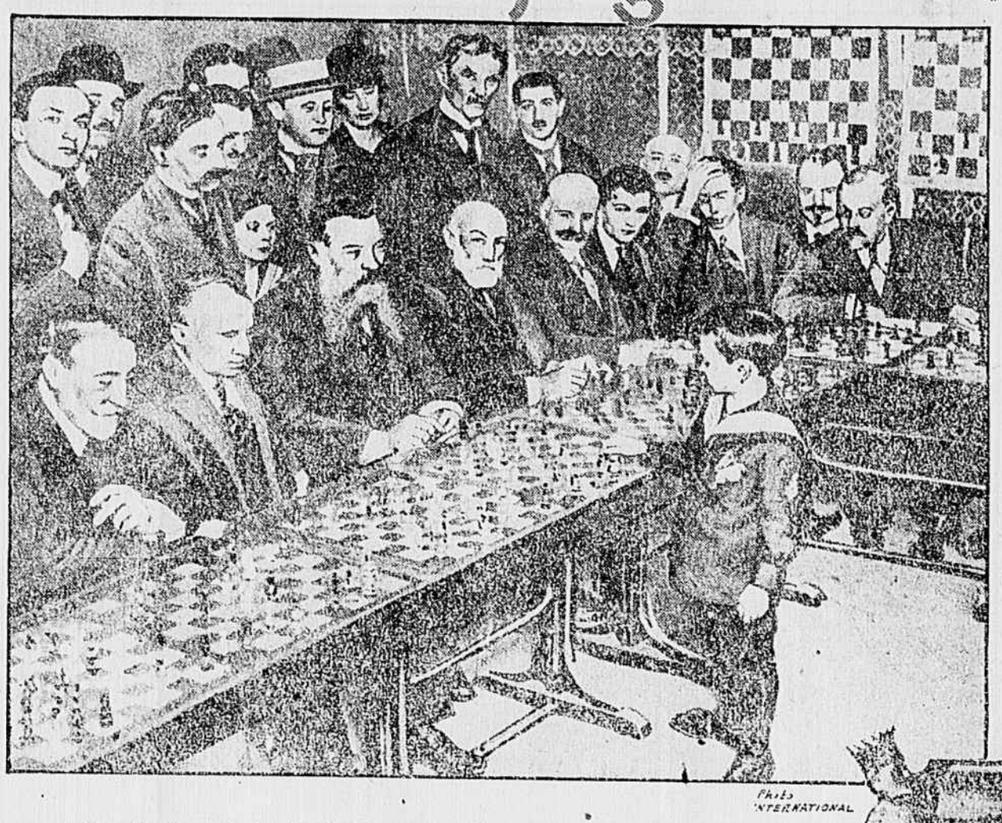
Science Trying to Account for Infant Prodigies

If Scientists Can Understand How a Boy of 8, Who Cannot Read or Write, Can Beat All the Gray-Bearded Chess Experts of the World, Perhaps It Can Build Up in Him a Super-Brain Which Will Be Useful to Mankind



FRIED INTERNATIONAL

Scene at One Section of the 22 Simultaneous Chess Games in Paris Where 8-Year-Old Samuel Rzeszewski Beat All the Old Gray-Bearded Chess Champions of France.

Little Samuel Rzeszewski at the Chess Board.

CARDINAL NEWMAN, the distinguished English prelate, was reading Greek at the age of four.

Goethe, the German poet, mastered Greek and six other languages before he was ten years old.

Little Miss Winifred Stoner, an American girl, successfully passed the Leland Stanford Junior University examinations at the age of nine.

Edward R. Hardy, a twelve-year-old New York boy in knickerbockers, is now a freshman in Columbia University, familiar with twelve languages, and in many ways better educated than some of the professors who will try to instruct him.

Little Samuel Rzeszewski, an eight-year-old Polish peasant boy, now in New York, played all the world's greatest chess experts throughout Europe before he could read or write—and beat them.

Science is stumped to account for the extraordinary exploits of these "infant prodigies." How can an eight-year-old child, illiterate, with untrained mind and limited experiences, unerringly outmatch the gray-bearded experts who have spent a lifetime studying and perfecting themselves in what is not a game of chance but an intellectual contest?

Science has searched about for an answer, but no theory yet advanced accounts for these child wonders.

For many years careful study and observation has been made of backward, defective and delinquent children, but little attention has been paid to the study of exceptionally brilliant children. This field of research, however, has at last attracted the attention of psychologists, and a thoroughgoing study of exceptional children is being made, so that, sooner or later, science hopes to explain why it is that the brain of an untrained, inexperienced child can excel the best efforts of the best brains of mature people who have specialized in some special field.

The little Polish chess player, Samuel Rzeszewski, has been examined by investigators in several of the capitals of Europe, and during his stay in America he will be studied and experimented upon by American psychologists.

Little Samuel is an extremely good specimen to study. If science can explain how the machinery in his head can beat the whole world in solving the problems on the chess board, it is hoped that the information obtained may furnish science with a plan for turning the exceptional genius of such a boy into useful paths, so that the peculiar mental endowment which Nature has given the child prodigy may be stimulated to build the mentality of a super-man, possibly to the great benefit of all mankind.

Little Samuel was born in a small town near Lodz, Poland. The ebb and flow of the war made it impossible for the child to obtain an education, although in recent months he has been taught to read and write a little—but this is since he had demonstrated his invincible powers as a chess player.

Samuel was five years old when he played his first game of chess. His father was a fair chess player, and the child, skylarking about the room, used to mischievously upset the board. In order to interest the youngster enough to keep him quiet, his father taught him the moves.

One night as the boy's father was playing a game of chess with a neighbor, Samuel suddenly suggested a move which was so radical that his father refused to make it, and apologetically explained to the visitor that the child had had no experience and no attention should be paid to his silly suggestions.

Samuel made no remarks, but watched his father play, and when he had lost the game the child reconstructed the chessmen on the board, played his own suggested move and showed how it could not possibly fail to win. He was five years old then. From that time on the boy beat his father at every game and all of the neighbors who came to the house.

So far as can be ascertained, none of the boy's ancestors were chess players or notable in any other achievements. Aside from his extraordinary genius at chess, there is nothing unusual or remarkable about Samuel. He is in all other respects a normally bright, healthy child. He likes football, can box a little, eats the usual things, sleeps ten or eleven hours and is especially interested in his new bicycle. He has one brother and two sisters who are not remarkable in any way and who do not play chess.

Little Samuel is less interested in chess than in anything else. As a matter of fact, the game bores him and he never asks to play it. But when the board is set and the child is fed up to it he plays swiftly and without hesitation. Each move he makes seem to him the only possible move, the inevitable one, and he has no second choice in his mind or misgivings.

Samuel is unable to tell how it is that he knows the move which he unerringly makes. There seems no other play possible, he says, and he makes it. He thinks it curious that his opponents do not always make the same play that he always sees to be the only correct play, and he wonders why his opponents do not always foresee that he will make the play that he does make. The moment his opponent makes a play, Samuel instantly recognizes whether it is a false play or the only possible correct play.

It makes no difference to the child how many chess boards are in the room. He can walk around and around naming the move on each board that he comes to without the necessity of studying the move or recalling previous moves. In Paris there were set up twenty-two chess boards in a long rectangle. On the outside of the boards were crowded 200 or 300 of the oldest champion chess players of Europe. They lifted little Samuel over into the centre of the enclosure. Walking rapidly from one board to the other the child made his moves swiftly and without hesitation. He traveled round and round and one after another won every game in spite of the earnest concentration, consultation and combined skill of the assembled opponents. Single handed this illiterate eight-year-old child quickly and easily outmatched the experienced old gray-bearded chess experts of Europe.

In London and in half a dozen other great cities of Europe the boy accomplished the same feat. In one match where he was playing thirty-three games at once the judges awarded one game out of the thirty-three to an opponent—but this was because the time allowance had expired. On one other occasion the judges decided that a game with Rubenstein, the famous European chess master, was a draw.

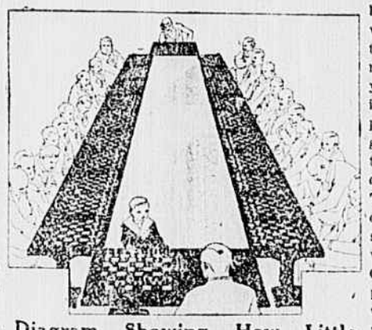


Diagram Showing How Little Samuel Walked Rapidly from Game to Game Making His Plays on the 22 Chess Boards and Single-Handed Beat All the Chess Champions of France.

Since little Samuel arrived in this country he has repeated his triumphs of the Old World. The members of the Chess Club of New York had been hearing about him, of course, and when the news came to them several months ago that the youngster was coming to America they put their heads together and devised three specially difficult chess problems. The day after the child walked off the steamer he was invited up to the Chess Club to tackle the problems which the wise ones had been rigging up for him.

Samuel was brought in, shook hands with everybody, gazed about the room, and then in a bored sort of way strolled up to the three tables, and in less than three minutes each had solved every one of the three problems that had been set for him.

If there is one thing that is taught and practised among the officers of the United States army it is strategy. In addition to the specially devised course of instruction at the West Point Military Academy every encouragement is given to the practice of everything that helps train the mind to forecasting moves of the enemy. The game of chess has always been highly valued as excellent mental training for strategy. Among the officers of the United States army are some mighty good chess experts.

The best trained minds of the army are assigned to duty to instruct the cadets at West Point, and therefore among the military teachers at the academy are the best strategists and best chess players in the service. When the report of the arrival of the eight-year-old chess strategist reached West Point an invitation was sent to young Samuel to come up as a guest of the army officers to see whether it was possible that this child was a better strategist than these picked men of the army.

Samuel accepted the honor and the invitation, and when he walked into the great gymnasium of the institution he found twenty chess boards set in a hollow rectangle. Wearing a blue naval uniform and a big bunch of medals pinned on his blouse the child crawled in under the tables, and with his little head not much higher than the chess boards began softly whistling to himself as he marched from game to game making his moves.

On the other side of the chess boards were several dozen generals, colonels, majors and captains in full uniform—an imposing general staff of specialists, strategists and chess experts. But this did not disconcert the eight-year-old. The child trotted right around from table to table and quickly won nineteen of the twenty games. The twentieth game was called a draw—the child had neither won nor lost it. Samuel once again remarked casually that he had never been beaten.

How does he do it?

Science is endeavoring to find out.

If science can fathom the mystery of this extraordinary childish brain, can it learn how to guide this boy genius on to greater things and produce a wonderful super-brain which will solve useful problems for all mankind that now lie beyond the reach of human minds?

Scientists who have studied Samuel claim that the boy goes through seventeen processes of thinking in the time that one person usually takes to think once. The boy runs through and solves in two minutes the complicated problem lying before him on the chess board which requires half an hour of study by experienced chess experts. What is the secret of little Samuel's superior mental equipment? Science hopes to find out.

Already the scientists have accumulated many interesting facts in regard to defective children and exceptional or precocious children. The common belief that the very bright child is likely to be feeble in health has been disproved. By the measurements of intelligence known as the Binet-Simon mental tests many interesting things have recently been discovered.

Learning to read considerably in advance of the normal age of six years is one of the most significant indications of superior ability. The child of four years who learns to read as readily as the child of six will almost certainly show a very high rate of intelligence under the Binet-Simon test. The superior child will learn to walk a little more than two weeks sooner than a child of average ability and will learn to talk about three months sooner.

One of the interesting and important things already demonstrated by the scientific measuring of children's intelligence is that adenoids, diseased tonsils and certain other physical defects are probably not as harmful to mental development as we have always believed. Children who have had their adenoids or tonsils removed look and act much brighter, but psychology's tests show that their actual ability remains the same as before and that they develop mentally little if any faster.

Another popular idea which has been pretty thoroughly exploded by the measuring of children's intelligence is the one which claimed that exceptional brightness in childhood was unlikely to be lasting. According to this view, the superior ability which shot up like a rocket during the early years was very apt to drop to mediocrity by the time manhood or womanhood was reached.

Careful studies of a large number of children show that those who make exceptionally good records in the lower grades also, as a rule, make superior records in high school and in college. The reason why the superiority of a bright child is less apparent as he grows older is that he is constantly advancing into more highly selected groups, where children of inferior ability grow fewer and fewer. A boy who is rated as "very superior" in the Fifth Grade, and as merely "superior" in high school, and only "average" in college, has not deteriorated; he only seems to have done so because the average for his class has gone up.

Everything tends to show that the superiority in mental ability which shows itself early in life is usually permanent.

Miss Winifred Stoner Who Passed the Leland Stanford University Examinations at the Age of 9.

Photo INTERNATIONAL

Edward R. Hardy, 12-Year-Old Precocious Freshman at Columbia University.

In other words, the little Polish boy who beats all the chess champions is likely, unless some serious mistake is made in his education, to continue developing mental power and to become finally a great man of genius.

Lombroso and other scientists who feel sure that insanity and genius are closely related will watch the career of Samuel Rzeszewski with keen interest. They are curious to know whether he will duplicate the unhappy fate of Paul Morphy. Morphy, like this young Polish prodigy, was an expert at chess when a mere boy, and later became the world's champion at the game. But the brain which had shown such surprising promise in its early years collapsed when Morphy was still a young man. He went insane, and died at the age of thirty, a raving maniac.

The histories of other men who have attained eminence as chess players show that a surprisingly large number of them have lost their reason. Can it be that this Polish boy's remarkable precocity is only an indication of future madness, and that this will be the price he will have to pay for his childhood triumphs?